

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings of claims in the application:

### **LISTING OF CLAIMS:**

Claims 1 to 15. (Canceled).

16. (Previously Presented) An optical liquid crystal modulator comprising:

at least one ferroelectric liquid crystal, wherein the at least one ferroelectric liquid crystal has a DHF mode and, at a location of the at least one ferroelectric liquid crystal, exhibits an operating range of an electric field of more than  $20 \text{ V}/\mu\text{m}$ , wherein: at a temperature of about  $20.0^\circ \text{ C}$ , a helical pitch  $P_o$  is between about 0.1 to about  $0.5 \mu\text{m}$ .

17. (Previously Presented) An optical liquid crystal modulator comprising:

at least one ferroelectric liquid crystal, wherein the at least one ferroelectric liquid crystal has a DHF mode and, at a location of the at least one ferroelectric liquid crystal, exhibits an operating range of an electric field of more than  $20 \text{ V}/\mu\text{m}$ , wherein at a temperature of about  $20.0^\circ \text{ C}$ , a helical pitch  $P_o$  is about  $0.22 \mu\text{m}$ .

Claims 18 to 22. (Canceled).

23. (Previously Presented) A method for operating an optical liquid crystal modulator having a ferroelectric liquid crystal, comprising:

operating the optical liquid crystal modulator at a location of the ferroelectric liquid crystal in an operating range of an electric field of greater than  $20 \text{ V}/\mu\text{m}$ ,

wherein the ferroelectric liquid crystal has a DHF mode and wherein: the ferroelectric liquid crystal has a helical pitch  $P_o$  of about 0.1 to 0.5 at a temperature of about  $20.0^\circ \text{ C}$ .

24. (Previously Presented) A method for operating an optical liquid crystal modulator having a ferroelectric liquid crystal, comprising:

operating the optical liquid crystal modulator at a location of the ferroelectric liquid crystal in an operating range of an electric field of greater than  $20 \text{ V}/\mu\text{m}$ ,

wherein the ferroelectric liquid crystal has a DHF mode and wherein the ferroelectric liquid crystal has a helical pitch  $P_0$  of about  $0.22\ \mu\text{m}$  at a temperature of about  $20.0^\circ\text{C}$ .

Claim 25. (Canceled).

Claim 26. (Canceled).